CLAIMS:

1.   An overdrive circuit (20) for a display panel (1) comprising a pixel (10) having inertness, the circuit (20) comprising:

        a means (24) for receiving a start value (SV) and a desired value (DV) being either an input value (IV) indicating an image to be displayed, or a clipped value (CV) to supply an overdrive value (OV) to the pixel (10),

        means (30) for substituting the input value (IV) by a reachable response within one predetermined period (Tf) starting from the start value (SV) to obtain the clipped value (CV), and

        a memory (23) for receiving the clipped value (CV) to supply the start value (SV) being the clipped value (CV) delayed over the one predetermined period (Tf), wherein the means (30) for substituting comprises a means (22) for indicating for the start value (SV) a corresponding minimum value (MI) being reachable from the start value (SV) within one predetermined period (Tf) when a minimum drive value (MID) is applied to the pixel (10), and a corresponding maximum value (MA) being reachable from the start value (SV) within one predetermined period (Tf) when a maximum drive value (MAD) is applied to the pixel (10).

2.   An overdrive circuit as claimed in claim 1, wherein the predetermined period (Tf) is a frame period (Tf).

3.   An overdrive circuit as claimed in claim 1, wherein the means (24) for receiving comprises a table look up circuit (24) for providing an overdrive value (OV) for pairs of the start value (SV) and the desired value (DV).

4.   An overdrive circuit as claimed in claim 1, wherein the means (22) for indicating comprises a table look up circuit for providing the minimum value (MI) and the maximum value (MA) for the start value (SV).

5.   An overdrive circuit as claimed in claim 1, wherein the means (22) for indicating comprises a function circuit (22) for generating the minimum value (MI) and the maximum value (MA) from the start value (SV) in accordance with at least one predetermined function.

6.   An overdrive circuit as claimed in claim 4, wherein the table (22) comprises for all possible start values (SV) a corresponding minimum value (MI) and a corresponding maximum value (MA).

7.   An overdrive circuit as claimed in claim 4, wherein the table (22) comprises for a subset of all possible start values (SV) a corresponding stored minimum value (SMI) and a corresponding stored maximum value (SMA), and wherein the means (30) for substituting are arranged for interpolating the minimum value (MI) and the maximum value (MA) for a start value (SV) in-between start values (SV) stored in the table (22) from corresponding stored minimum values (SMI) and stored maximum values (SMA) available in the table (22).

8.   An overdrive circuit as claimed in claim 1, wherein the means (30) for substituting comprises a clipping means (21) for receiving the input value (IV) representing a brightness of the pixel (10) in a present predetermined period (Tf), the minimum value (MI), and the maximum value (MA) to supply the clipped value (CV) being: (i) the input value (IV) if a level of the input value (IV) is higher than the minimum value (MI) and lower than the maximum value (MA), or (ii) the minimum value (MI) if the input value (IV) is equal to or lower than the minimum value (MI), or (iii) the maximum value (MA) if the input value (IV) is equal to or higher than the maximum value (MA).

9.   An overdrive circuit as claimed in claim 3, wherein the table look up circuit (24) comprises difference overdrive values (DOV) representing a difference between the desired value (DV) and the overdrive value (OV), and in that the feedback overdrive circuit (20) further comprises an adder (25) for summing the difference overdrive values (DOV) and the corresponding desired values (DV).

10.   A display device comprising the overdrive circuit (20) as claimed in claim 1, and the display panel (1).

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11.   A display apparatus comprising the display device as claimed in claim 10, and signal processing circuitry (SPC).

5   12.   A method of overdriving a pixel of a display panel, the pixel having inertia, the method comprising:

receiving (24) a start value (SV) and a desired value (DV) being either an input value (IV) indicating an image to be displayed, or a clipped value (CV) for supplying (24) an overdrive value (OV) to the pixel (10),

10   substituting (30) the input value (IV) by a reachable response within one predetermined period (Tf) starting from the start value (SV) to obtain the clipped value (CV), and

storing (23) the clipped value (CV) to supply the start value (SV) being the clipped value (CV) delayed over the one predetermined period (Tf), wherein

15   the substituting (30) uses a step (22) of indicating for the start value (SV) a corresponding minimum value (MI) being reachable from the start value (SV) within one predetermined period (Tf) when a minimum drive value (MID) is applied to the pixel (10), and a corresponding maximum value (MA) being reachable from the start value (SV) within one predetermined period (Tf) when a maximum drive value (MAD) is applied to the pixel

20   (10).